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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------------|------------------|
| 10/816,935 | 04/05/2004 | Hideya Seki | 119350 | 3096 |
| 25944 7590 01/29/2007 OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320 | | | EXAMINER KOVAL, MELISSA J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2851 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/816,935

Applicant(s)

SEKI ET AL.

Examiner

Melissa J. Koval

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5 and 23 through 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5, 23, 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 23, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burstyn et al. U.S. Patent 6,511,186 B1 in view of Turushima U.S. Patent 6,575,581 B2).

Claim 5 sets forth: " A rear-type projector comprising (See Figure 5a of '186 B1. Also see BACKGROUND OF THE INVENTION of Burstyn et al. '186 B1.):

a laser beam source that outputs a laser beam that is modulated based on an image signal (See laser 324 of '186 B1.);

a scanning unit that scans the laser beam within a predetermined surface (See column 4, line 21 wherein the teaching of the scanning projection system 320 begins of '186 B1.);

a screen to which the laser beam is projected from a backside of the screen (See viewing screen 338 of '186 B1.);

a light source unit for screen monitoring that emits invisible light for monitoring the screen (See Figures 1 and 2 of Turushima '581 B2. Also see laser beam source 1 and detection wave source 5 of '581 B2. See column 4, lines 21 through 27.);

a screen monitoring unit that receives the invisible light reflected from the

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screen (See reflection wave sensor 6 of '581 B2.);

a beam light supply stopping unit that controls the laser beam source so as to stop output of the laser beam based on an output of the screen monitoring unit (See column 5, lines 14 through 21, of '581 B2 for example.) ; and

a housing that covers an optical path from the laser beam source to the backside of the screen."

Burstyn et al. '186 B1 teaches all of the elements of claim 1, except Burstyn et al. '186 B1 do not specifically show "a light source unit for screen monitoring that emits invisible light for monitoring the screen; a screen monitoring unit that receives the invisible light reflected from the screen; a beam light supply stopping unit that controls the laser beam source so as to stop output of the laser beam based on an output of the screen monitoring unit; and a housing that covers an optical path from the laser beam source to the backside of the screen." Burstyn et al. '186 B1 does employ focus and aim device 342 that operates depending on the state of the screen, but the teaching is silent as to the on and off operation of the light source depending on the state of the screen.

Means for detecting invisible light as reflected from a screen and then using the detected invisible light to turn a laser light source off and on are well known in the art as shown by Turushima U.S. Patent 6,575,581 B2 and described in the rejection above.

The presence of a housing is implied for both references.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the rear projection system of Burstyn et al. '186 B1 to

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include an infrared detection system as that shown by Turushima U.S. Patent 6,575,581 B2, thus meeting the limitations of claim 1. The motivation for one having ordinary skill in the art to make such a modification would be to improve the safety of the device for any observer.

With respect to claim 23, see column 4, lines 32 through 42, in view of the above remarks.

With respect to claims 25 and 26, see columns 5 through 7. Particularly with respect to claim 26, a differential is discussed in column 6, lines 58 through 64, and column 7, lines 1 through 15.

Allowable Subject Matter

Claim 24 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Each and every limitation of claim 24 in combination is required to patentably distinguish the claim over the prior art of record.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

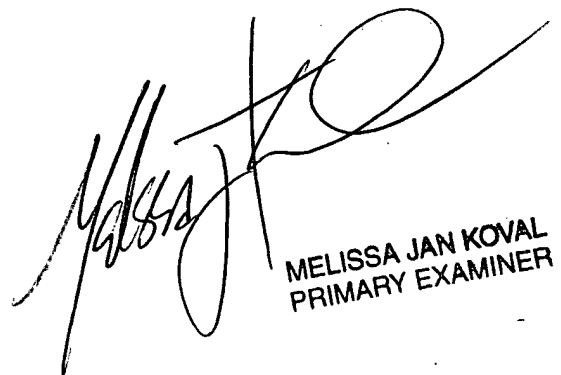
Izumi et al. U.S. Patent 6,163,348 teaches an image display apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa J. Koval whose telephone number is (571) 272-2121. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571) 272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melissa Jan Koval
Primary Examiner
Art Unit 2851
MJK



MELISSA JAN KOVAL
PRIMARY EXAMINER